RESERVE BANK INFORMATION AND TRANSFER SYSTEM

Low Value Clearing Service (Clearing Interconnector)

User Guide

July 2010

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1. INTRODUCTION

1.1 Background to the Low Value Clearing Service

In 2010/2011, the Australian payments industry will migrate from the bilateral links used for the clearing of payments to an industry Community of Interest Network (COIN) or to SWIFT (using the SWIFT FileAct service).

The Reserve Bank provides a Low Value Clearing Service (the 'Clearing Interconnector', or LVCS) to facilitate file transfers between Clearing Participants using SWIFT FileAct and Clearing Participants using the COIN. Clearing Participants may also use the Low Value Clearing Service as a central point for the exchange of clearing related files with all other participants.

1.2 What this User Guide Covers

This user guide provides information on the LVCS, and includes details on the operation of the service as well as the administrative arrangements in place for the use of the service. This includes the set-up of new LVCS Participants and the activation of file transfers with Exchange Partners.

Please refer to the Glossary at the rear of this document for defined terms which are capitalised in this user guide.

1.3 Audience for this User Guide

This user guide is provided for RITS Members who use, or who wish to use, the LVCS. This includes all direct participants in the various payments clearing systems that exchange Approved File Types.

New users of the LVCS may include:

- existing members of the low value payments clearing system(s) who wish to change their level of participation so that they can directly exchange files with other Clearing Participants;
- new low value payments clearing system entrants. These entrants may wish to use the LVCS to establish file exchange capability with existing Clearing Participants;
- existing Clearing Participants who use a Courier (referred to as an 'Agent' in the RITS Regulations and Conditions of Operation) for their file exchanges who may now wish to directly perform this function; and
- a party that wishes to establish operations as a Courier on behalf of a Clearing Participant.

1.4 Obtaining Copies of this User Guide

This user guide and other RITS Member documentation on the LVCS are available from the RITS Information Facility. The Information Facility can be accessed from within RITS (select the Information icon in the Header) or via the Internet (http://www.rba.gov.au/rits/info/).

Guides are downloadable in PDF form, which can then be saved locally or printed.

If a Member has difficulty downloading the user guide, the Reserve Bank will provide limited printed copies on request.

1.5 RBA Contacts

All general enquiries regarding the LVCS should be directed to the **LVCS Help Desk**. Contact details are as follows:

Telephone: **1800 617 566**

Email: **lvcshelpdesk@rba.gov.au**

Facsimile: 02 9551 8063

Telephone and email support are available during normal clearing hours (i.e. between 7.00 am and 1.00 am from Monday to Saturday on days that are not national public holidays).

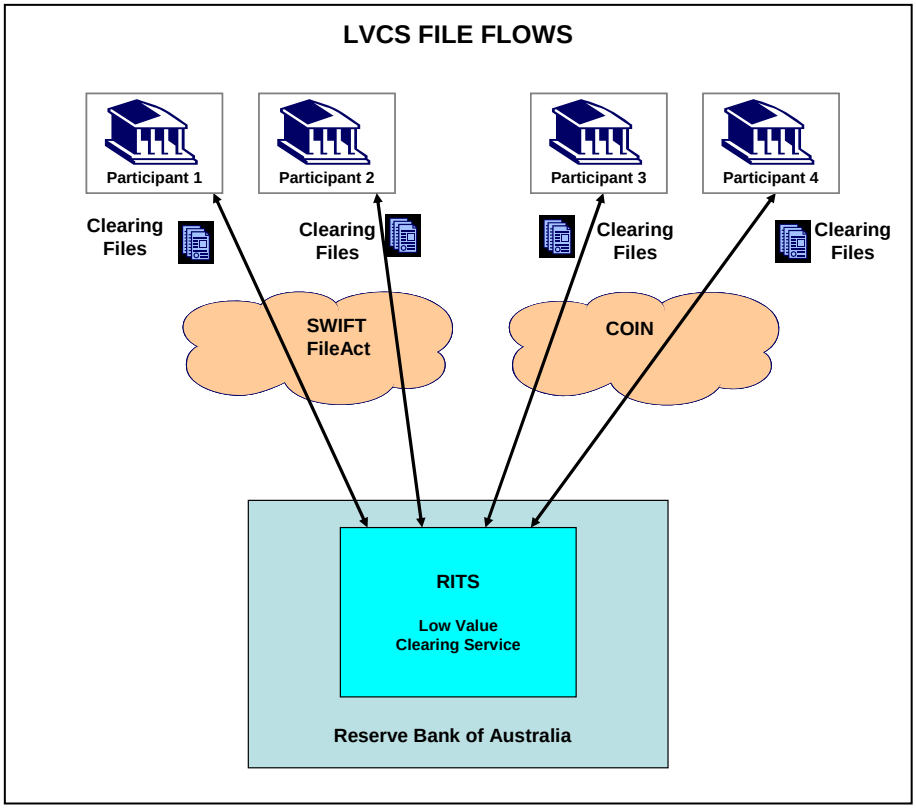
In addition, the table below lists additional RBA contacts for business and technical support in relation to the establishment of file transfers using the LVCS.

Role assisting with LVCS set-up	**Contact**
Payments Settlements (PS) Business Enquiries	Senior Manager, Planning & Client Relations 02 9551 8941
Communications Infrastructure Enquiries	Manager, Communications 02 9551 9536
File Transfer Protocol Enquiries	Manager, Network Services 02 9551 9450
Security Enquiries (including exchange of COIN Pre-Shared Secrets)	Manager, Security Analysis 02 9551 9427

Once LVCS file transfer arrangements have been established, RITS Members should contact the LVCS Help Desk for all enquiries.

2. LVCS OVERVIEW

This section provides new users with an overview of the LVCS and how it operates. The diagram below illustrates potential LVCS file flows.



2.1 Eligible Participants

The LVCS is available to all direct Clearing Participants eligible to exchange files related to payments clearing activity in Australia.

The RITS Regulations and Conditions of Operation incorporate this service. All Clearing Participants who use the LVCS must be RITS Members.

2.2 Couriers

The LVCS also accepts files from, and delivers files to, third party agents (or "Couriers" in this user guide) who have been authorised by Clearing Participants to send and receive clearing files on their behalf.

The RITS Regulations and Conditions of Operation have been amended to include the ability for Clearing Participants to appoint agents. The form of authorisation required is set out in Exhibit D of the RITS Regulations.

The RBA usually deals with the agent of a Clearing Participant on operational and administrative matters associated with file transfers across the LVCS. However, each Clearing Participant remains responsible for providing authorisation to the RBA for the set-up of Production file names and the activation of Production File Rules in the LVCS.

2.3 Approved Networks

The RBA has approved the use of the Telstra COIN and SWIFT (using FileAct) for the LVCS.

2.4 Approved File Transfer Protocol

The LVCS uses the Connect:Direct file transfer protocol for all file exchanges over the COIN.

Participants wishing to use a different file transfer protocol for COIN file transfers should contact the RBA to discuss their service needs.

The LVCS uses the FileAct file transfer protocol for all file exchanges over SWIFT.

2.5 Approved File Types

The LVCS accepts the following types of file transfers:

- Australian Paper Clearing System (APCS) – all Electronic Presentment & Dishonour (EP&D) related files, including presentments, dishonours, dishonour refusals, technically invalid dishonours and all acknowledgements.
- Bulk Electronic Clearing System (BECS) – transaction and summary files for normal and government direct entry payments (including transaction files that contain return/refusal/reversal items), and direct entry settlement reports (sent by the RBA only).
- Consumer Electronic Clearing System (CECS) – interchange settlement reports (note: the LVCS cannot be used for ATM/EFTPOS transaction approval messaging).
- Collator and Commonwealth Government Agency banking files (exchanged with the RBA only).

The use of File Types allows the RBA to perform LVCS administration. A list of approved File Types is provided below. The RBA will consider requests to add other types of payments clearing file transfers as required. LVCS Participants will be advised of any changes to this list.

File Type	***Description***
Australian Paper Clearing System (APCS; CS1)	
EPDA	File A – Electronic Presentment
EPDB	File B – Presentment Acknowledgement and Technically Invalid
EPDC	File C – Presentment Technically Invalid Acknowledgement
EPDD	File D – Dishonour, Dishonour Refusal and Voucher Required
EPDE	File E – Dishonour Acknowledgement and Technically Invalid
EPDF	File F – Dishonour Technically Invalid Acknowledgement

File Type	*Description*
Bulk Electronic Clearing System (BECS; CS2)	
DENT	Direct Entry Normal Transaction
DENS	Direct Entry Normal Summary
DEGT	Direct Entry Government Transaction
DEGS	Direct Entry Government Summary
DESR	Direct Entry Settlement Report *(sent by RBA only)*
Consumer Electronic Clearing System (CECS; CS3)	
CEIS	CECS Interchange Summary Report
National Collator files	
NCES	National Collator Exchange Summary
NCEA	National Collator Error Advice
NCPA	National Collator Provisional Advice
NCFA	National Collator Final Advice
NCNO	National Collator Net Obligations
Commonwealth Government Agency Banking files	
GAAB	Government Agency Account Balances
GASO	Government Agency Settlement Obligations
GAHV	Government Agency High Value Payments
GAPD	Government Agency Pending Debits
Test files	
TEST	LVCS Participants may wish to set up a File Rule for a non-specific file type in order to conduct initial connectivity testing using a file name that is not a production or normal test file name.

2.6 File Processing Using Alternate Sites

The LVCS is able to exchange files from the RBA's primary and secondary sites. It is also able to exchange files with the primary and secondary sites of each Exchange Partner.

LVCS Participants using the COIN are given the host IP address of the LVCS at the RBA's primary and secondary sites, and can to configure their systems to use the secondary IP address if the primary IP address is not accessible after their chosen number of retry attempts.

Depending on their internal systems design, LVCS Participants using the COIN can also advise the RBA of the host IP address at their secondary site. This address can be used by the RBA to send files if access to the primary site address is unavailable. The RBA is able to automatically divert files to the secondary address after an agreed number of retry attempts. This is discussed with each participant when connectivity is established.

The switching of SWIFT connectivity between primary and secondary sites by a SWIFT LVCS Participant is transparent to other SWIFT FileAct users, as the same Distinguished Name is used.

2.7 LVCS Environments

The RBA has established a Production Environment and a Pre-Production (or Industry Test) Environment for the LVCS. These environments are differentiated by the use of different host IP addresses for LVCS COIN participants and different Technical Service Names for LVCS SWIFT FileAct participants. In addition, for SWIFT FileAct transfers, the RBA uses different Distinguished Names in Pre-Production and Production.

Static data entry and other LVCS Participant set-up activities are completed separately for each environment.

LVCS Participants are expected to use different file names when testing files in the Pre-Production Environment and transferring files in the Production Environment. If the same file names are used, identical File Rules would exist in both environments and participants will not be protected if a test file is accidentally sent to the Production Environment. That "test" file, if accidentally sent to the LVCS Production Environment, would be processed and sent on to the recipient's Production COIN or SWIFT FileAct destination address.

The Pre-Production Environment is available for use by new and existing LVCS Participants for any type of file transfer testing that is required.

2.8 File Name Translation

The LVCS has file name translation capability. The name that a file has when it is sent to the File Recipient by the LVCS can be different from the name that the file had when the File Sender delivered it to the LVCS. This capability has been designed to facilitate a move from proprietary file names to an industry clearing file name standard (a version of which has been proposed by the RBA in the document *Payments Network Connectivity: Partner Migration Information Paper*, dated December 2009). It can also be used to translate between proprietary file names if required.

However, in considering whether or not to use the file name translation capability, participants should note that if a file name is translated, it will not share a common file name with its Exchange Partner. This may impact on the ability of operational staff to troubleshoot any file processing difficulties as the names seen by each participant will be different. There are also implications if fallback to industry-agreed contingency arrangements is required.

The use of file name translation also needs to be considered in the context of future same-day settlement of low-value clearing files. The sender of a clearing file will create and send a settlement instruction to the RBA, and a reference field in the settlement instruction will include the name of the file (as it was when sent by the sender). Following settlement, the RBA will send a settlement response to the two RITS counterparties which will include a file name reference field to assist with reconciliation. If the recipient's file name has been translated by the LVCS, the file name contained in the settlement response will not be the same as the name of the file received from the LVCS.

The file name translation capability is not intended to replace current clearing file names, but may be used in the future to assist the industry to adopt a common file naming standard.

2.9 File Processing and File Name Matching

When receiving files, the LVCS uses the File Sender's identity and the file name to determine which File Rule to apply. The File Rule specifies how to deliver the file to the File Recipient and whether or

not file name translation is required. The File Rule is created from static data provided by each Clearing Participant. This static data therefore forms part of the instruction that the LVCS will act upon.

Normal industry practice is for the File Recipient to nominate the file name it wishes to receive. The file name required is usually a fully resolved name (i.e. it has no variable components such as a date). If this is the case, and the File Sender delivers the file to the LVCS with the name required by the File Recipient (i.e. no file name translation is required), the File Rule will use this same fully resolved file name.

File Recipients who wish to use file names that have a variable component may do so. However, this will require the agreement of the File Sender (as file name translation capability is not available in this circumstance). File Recipients should contact the RBA for further information on the additional steps required in this circumstance.

The LVCS will process files as it receives them in accordance with the File Rules that have been configured in the system. The LVCS will not check for duplicate files if it receives them from a File Sender, nor will the existence of duplicate files be specifically monitored. Responsibility for ensuring that duplicate files are not sent and received will rest with Sending and Receiving Principals (or their appointed Couriers) as is currently the case.

Section 6 provides more information on the role of static data in the file transfer and set-up process.

2.10 Distinguishing File Transfers: File Sender to LVCS

Each Exchange Partner using the COIN delivers files to the LVCS into a destination nominated by the RBA called a mailbox. The RBA will supply details of each mailbox and its credentials when commencing the process of establishing LVCS COIN connectivity. If a File Sender acts for more than one party, separate mailbox address paths will be advised. This is to allow the LVCS to separately identify each Sending Principal.

2.11 Distinguishing File Transfers: LVCS to File Recipient

The File Recipient's COIN receiving destination directory (if applicable) can be a nominated default location for all files (which the Exchange Partner will setup as part of establishment of COIN connectivity), or separate paths can be nominated for different files. For example, a File Recipient can specify one destination for BECS files and another for APCS files. An Exchange Partner that is a Courier may wish to specify different destination directories for different Receiving Principals.

File path details, if required, will be collected by the RBA on the Participant File Transfer Details Form (see Section 6).

2.12 Variations to Static Data: Existing LVCS Participants

When a new LVCS Participant is established, existing counterpart LVCS Participants will need to add to the LVCS static data recorded by the RBA in the LVCS to include file names for their exchanges with the new Participant. The standard collection form and confirmation report will be used for this purpose.

Other circumstances in which an existing LVCS Participant may need to change its static data include:

- joining or resigning from a clearing system that has file exchanges. This will require the addition or removal of File Types;

- participant system changes. This may require changes to the static data held in the LVCS (e.g. a new IP address, a changed mailbox or a different destination address); and

- file name changes. This will require amendments to existing File Rules.

The RBA will process all change requests supported by appropriately signed documentation. As a guide, at least one week's notice for Production changes should be provided.

The LVCS Pre-Production Environment is available to Participants for testing the types of changes listed above. This environment is also available for the testing of new file exchanges between new or existing Clearing Participants.

Forms for change requests are available on the RITS Information Facility or on request from the LVCS Help Desk.

2.13 Participant Contingency Arrangements

LVCS Participants should note that if they (or their Courier) or another Clearing Participant (or its Courier) are unable to exchange clearing files on an end-to-end basis via the LVCS due to any form of contingency event, they will need to exchange files using agreed industry fallback arrangements. At present, this requires the exchange of clearing files using secure PGP email.

All contingency clearing file exchanges are to occur directly between the relevant parties and will not involve the LVCS. All LVCS Participants must therefore have processes in place to generate and directly exchange clearing files via the agreed contingency method.

Participants who exchange collator and government agency banking files with the RBA via the LVCS must use the separate contingency arrangements which exist when normal file exchanges are unable to take place.

3. KEY SERVICE ARRANGEMENTS

This section provides a summary of the service arrangements adopted by the RBA for the LVCS.

3.1 Governance

The legal underpinning for the provision of the LVCS is provided in the RITS Regulations and Conditions of Operation. The RITS Regulations bind the RBA and each RITS Member to an enforceable contract. For the LVCS, the RITS Regulations set out the rights and responsibilities of each party using this service.

For other general information on governance, please see *RITS Low Value Feeder Project: Overview of Governance Arrangements* (December 2009) available on the RITS Information Facility.

3.2 Technical Infrastructure

The RBA has established RITS technical infrastructure for the LVCS which leverages off the RBA's significant public policy investment in RITS. This technical infrastructure includes full redundancy of all systems and network connections at both primary and secondary sites and the mirroring of data between sites. Where practicable, failover from the failure of a single component is automated.

The RBA's network connections to COIN and SWIFT comprise dual links with physical (and logical) diversity to each RBA site. The RBA's four COIN connections are all 2 Megabits per second links with support and service levels the highest available from Telstra. The RBA's four SWIFT links are sized at 512 Kilobits per second. Link capacity has been specified to meet both normal and peak loads.

LVCS technical infrastructure has been designed to provide the highest standards of availability, resilience and reliability to LVCS Participants. As part of its overall risk management framework, the RBA has also developed business continuity arrangements to minimise the likelihood of operational disruptions. This includes support and operational staff being based at both primary and secondary sites. The RBA has successfully completed a range of initial failover and performance tests to ensure that its recovery procedures work as expected.

The Low Value Settlement Service (LVSS) will share the same technical infrastructure (for settlement instruction and response file transfers) as the LVCS.

3.3 RITS Security Arrangements

The new RITS technical infrastructure introduced for the LVCS (and the future Low Value Settlement Service) will adhere to the rigorous security arrangements for RITS. These cover the protection of data and systems within the RBA, access to the data and systems used by the RBA for file transfer processing, and the protection of systems from external threats.

The RBA has put the following measures in place concerning security arrangements for files processed by the LVCS:

- LVCS files are stored in an encrypted format and only retained for 7 calendar days (to cover extended weekends);
- strict user access arrangements are in place to restrict the ability to view or edit file content; and
- system controls prevent files from being inserted or updated during the file transfer process.

These and other RBA security measures are the subject of regular audits. The RBA also complies with the industry security standards set out in APCA's COIN Operating Manual and with network security standards of SWIFT.

3.4 Key Service Metrics

3.4.1 Service Availability

Production file transfers over the LVCS can occur during normal clearing hours (weekdays that are not national public holidays between 7.00 am and 1.00 am the next day) and normal RBA Collator hours (weekdays that are not national public holidays between 7.00 pm and 4.00 am the next day). These times are Sydney times. Supporting operational staff will be present during these hours.

Support for the Production Environment will not be available on weekends unless prior arrangements have been made with the RBA's LVCS Help Desk.

The Pre-Production Environment will be supported by the RBA during normal business hours (i.e. 9.00 am to 5.00 pm each business day). The environment may be available for "unsupported" testing (i.e. without LVCS Help Desk telephone support) after hours and on weekends, depending on RBA schedules for maintenance and failover verification. Participants wishing to conduct any weekend testing must contact the LVCS Help Desk as early as possible (at least two weeks notice) to confirm whether the environment will be available. Although the RBA will try and make the Pre-Production Environment available, this cannot be guaranteed for any particular weekend.

3.4.2 File Transmission Times

As with other RITS infrastructure, the LVCS has been designed to ensure the highest standards of availability and reliability. The capacity of the system has been specified to meet both normal and peak loads. The RBA's network and system components are scalable to cater for extra capacity requirements if these emerge.

The RBA performs extensive LVCS testing. This testing simulates a representative mix of clearing files being transferred between File Senders and File Receivers via the service using both the COIN and SWIFT FileAct.

On the basis of this testing (with conservative estimates of file sizes and peak loads), the following are indicative throughput and transit times that LVCS Participants can expect when transferring files via the service. These times should be taken as a guide only as actual transmission times will vary depending on the number and size of concurrent files being sent and received by different participants at once. The times indicated may also vary significantly depending on the network link sizes of each File Sender and File Receiver. All times shown include network transit times of the sender and receiver and LVCS processing times.

- A mix of 250 clearing files transferred concurrently across COIN/SWIFT in both directions simulating a **peak exchange period** (e.g. daily 8.00 pm exchanges) takes less than 45 minutes. The mix of files contains varying file sizes ranging from small to very large (50MB).

- A mix of 1000 clearing files transferred concurrently across COIN/SWIFT in both directions simulating a **peak exchange day** takes less than 120 minutes. The mix of files contains varying file sizes ranging from small to very large (50MB).

- The average end-to-end transit times of files (including COIN/SWIFT network times) from File Sender to File Recipient are:

  - ❖ A clearing file of 100KB will take approximately 1 minute to transfer.
  - ❖ A clearing file of 5MB will take approximately 10 minutes to transfer.
  - ❖ A clearing file of 50MB will take approximately 30 minutes to transfer.

  These times were measured during periods when no other file transfer activity was taking place. Longer times may be experienced during periods where there is high network traffic.

These expected transmission times may be updated by the RBA from time to time.

3.4.3 Target Failover Times

As mentioned in Section 3.2, the RBA has established technical infrastructure at both its primary and secondary sites with data mirrored between sites in real-time. If a full failover to the RBA's alternate site is required, the overall target recovery time is 40 minutes. This can be broken down as follows:

- LVCS file management systems – 40 minutes. This is to re-establish file transfers using applications and components running from the alternate site.
- COIN – no downtime is expected in respect to the availability of the COIN. The RBA has two connections to the COIN at both sites which are active at all times. However, File Senders should note that they will need to deliver files to the RBA's alternate host IP address if the primary host is unavailable.
- SWIFT FileAct – 40 minutes. This is to re-establish SWIFT FileAct connectivity using a SWIFT Alliance Gateway (SAG) at the alternate site. This can be done concurrently with the re-establishment of LVCS file management systems.

3.4.4 Notification of File Processing Failures

An LVCS File Sender will generally know from its own systems whether or not a file was successfully delivered to the LVCS for subsequent delivery to the File Recipient. This can occur through the use of Connect:Direct monitoring (for COIN transfers) and though SWIFT (using either real-time mode or by selecting the delivery notification option for store and forward file transfers). However, File Senders will generally not know if the file has been successfully delivered by the LVCS to the File Recipient.

As part of its LVCS processes, the RBA will closely monitor all file transfers. Transfers will be marked as unsuccessful after the system has attempted to send the file(s) to each File Recipient, including to nominated primary and secondary addresses (as applicable).

The RBA will notify the File Sender (via email/telephone) when a file(s) is unable to be delivered to a File Recipient. The RBA undertakes to provide this notification as soon as possible and in any case within 30 minutes (within normal clearing and Collator hours – refer to Section 3.4.1).

3.5 LVCS Production Monitoring and Support

3.5.1 Production Monitoring

The production operation of the LVCS will be closely monitored by RBA staff. As noted in Section 3.4.1, operational staff will be present:

- between 7.00 am and 1.00 am the next day on weekdays that are not national public holidays; this covers normal clearing file exchange hours; and
- between 7.00 pm and 4.00 am the next day on weekdays that are not national public holidays; this covers normal Collator file exchange hours.

RBA technical support staff are also available during these hours to the ensure continuity of production operations.

3.5.2 LVCS Help Desk Support

The RBA has established a Help Desk contact telephone number for use by LVCS Participants. This number is **1800 617 566.** This number is available for use on a 24 hours by 7 days basis. An email address has also been established specifically for the service. The email address is **lvcshelpdesk@rba.gov.au**.

The RBA will monitor all file transfers sent and received by the LVCS. The nature and extent of the RBA's Production Environment monitoring is as follows:

- The RBA will monitor **actual** file transfers to ensure their success. The RBA will not specifically monitor **expected** file transfers.
- Incoming files will be matched in the LVCS against a File Rule specific to the File Sender. Files which match a File Rule will be accepted and delivered to the File Recipient. The File Sender will be contacted by RBA staff if a file is received that does not match a pre-defined File Rule, or matches to an inactive File Rule.
- The RBA will attempt to deliver the file to the File Recipient using its nominated destination address details. This will include a pre-configured number of retry attempts and the use of a secondary destination if this has been supplied (COIN only). If files are unable to be delivered, the RBA will contact the File Recipient to determine the cause of the problem. The RBA will contact the File Sender if the problem is unlikely to be resolved within a 30 minute timeframe.
- The RBA will not monitor for files that may be sent more than once by the File Sender. All files that match a File Rule will be accepted and delivered to the File Recipient.
- The RBA will regularly monitor the status of its LVCS systems and the networks it uses for LVCS processing.

The Pre-Production Environment will not be monitored as closely as the Production Environment. However, the LVCS Help Desk will specifically monitor initial connectivity testing to the LVCS and initial end-to-end testing between the Exchange Partners. The LVCS Help Desk will also monitor test file exchanges when specifically requested to do so by Participants.

If a File Recipient, or a Receiving Principal, does not receive an expected file, it should **initially contact the File Sender** to confirm whether or not it has been sent. If the File Sender confirms

that the file has been delivered to the LVCS, the File Recipient should then contact the LVCS Help Desk.

File Senders and File Recipients should contact the LVCS Help Desk if they become aware of a problem affecting their ability to send and receive files over the LVCS and the duration of the problem is expected to be greater than 30 minutes.

3.5.3 File Resends

i) Successful Transfers

In general, the RBA **will not resend** any LVCS file transfer that has been successfully delivered to the File Recipient. If the File Recipient requires the file to be resent for any reason, it must contact the original File Sender and request that it resend the file.

In limited circumstances, the RBA will resend a successful file if written authorisation is received from both the File Sender and File Recipient. A File Re-Send Authorisation Form is available on the RITS Information Facility for this purpose (a sample of this form is shown in Section 8.4). Both Clearing Participants that are party to the file exchange must fill in the form with details of the file to be resent. The form must then be signed by RITS Authorised Signatories. Please note that RITS Members may provide the RBA with a separate list of RITS Authorised Signatories for the purpose of authorising LVCS file resends. The completed and signed form should be faxed or emailed (as a pdf) to the LVCS Help Desk (the fax number and email address are indicated on the form). Phone the LVCS Help Desk to advise when you have sent the form.

ii) Unsuccessful transfers

If a processing problem prevents the delivery of files from the LVCS to the File Recipient, the LVCS will show the transmission as unsuccessful. In this circumstance, the RBA will verify with the File Recipient (initially by telephone) whether or not the files have been received. If the File Recipient advises non-receipt, the LVCS Help Desk will send an email to the File Recipient's nominated operational contact (which may be a group email address). This email will:

- seek confirmation that the relevant files (as listed in the email) have not been received; and
- request authorisation to (re)commence the file transfer process.

Once the RBA receives the authorising return email from the File Recipient, the files will then be sent. The RBA will contact the File Recipient by telephone to confirm that the files have been successfully received.

3.5.4 Other Support for the Service

The RBA will also support the operation of the LVCS by:

- responding to telephone or email queries from participants in relation to all aspects of the service;
- providing an immediate response to nominated staff regarding requests relating to the processing status of a file transfer;
- providing advice and assistance in respect to adding, amending or deleting File Rules, and activating or deactivating a File Rule;

- assisting participants with the testing of file transfers using the Pre-Production Environment; and

- maintaining contact lists for each LVCS Participant (including name, phone and email details).

As is the case now with RITS, the RBA will keep participants informed via email and SMS if a problem occurs which affects LVCS file transfer processing. This will include the provision of regular updates. Conference calls may also be co-ordinated as required. These information flows will be facilitated by the RBA's RITS Communication Facility.

4. SWIFT FILEACT

This section outlines arrangements for participants exchanging files via the LVCS using the SWIFT FileAct Service. Prospective SWIFT Participants should note the details provided in this section cover **all** file exchanges over the LVCS, including file exchanges with the RBA as a Clearing Participant and as Collator.

4.1 Network/Service Overview

The RBA has set up a single SWIFT FileAct business service known as **"SWIFTNet Bulk Payments by the RBA"**. The RBA is the Administrator of this service.

The RBA has established Production (Live) and Pre-Production (Industry Test) Environments for use by participants. The Pre-Production Environment is indicated in the technical service name by the suffix "**!pu**".

For each environment, there are two RBA FileAct Closed User Groups (CUGs) – real-time and store-and-forward, indicated in the technical service name by the suffixes "**.rt**" and "**.sf**". Participants that use only the real-time or the store-and-forward mode need only join the relevant CUG. SWIFT Participants that wish to use the store-and-forward mode as a fall back to the real-time mode will need to join both CUGs.

All LVCS file exchanges using SWIFT FileAct must use the SWIFT Request Type of "pacs.xxx.cfe". This applies to the SWIFT leg of each file exchange to and from the LVCS and covers all Exchange Partners including the RBA. When the Low Value Settlement Service commences, other Request Types will be introduced.

The RBA will use the following SWIFT Distinguished Names (DNs) for each CUG and Request Type combination:

Pre-Production: ou=preprod,ou=bulkp,o=rsbkau2s,o=swift

Production: ou=bulkp,o=rsbkau2s,o=swift

These DNs apply to the RBA as both Sender (Requestor) and Receiver (Responder) in each environment - Production and Pre-Production (Industry Test) - and for all LVCS files, including those where RBA is the Exchange Partner. SWIFT Participants will need to advise the RBA of their Distinguished Name(s).

The above details are summarised in the table below:

Use	RBA Distinguished Name (DN)	Transfer Mode	Technical Service Name	Request Type
Prod	ou=bulkp,o=rsbkau2s,o=swift	Real Time	rba.bulkp.rt	pacs.xxx.cfe
Prod	ou=bulkp,o=rsbkau2s,o=swift	Store and Forward	rba.bulkp.sf	pacs.xxx.cfe
Pre-Prod	ou =preprod,ou=bulkp,o=rsbkau2s,o=swift	Real Time	rba.bulkp.rt!pu	pacs.xxx.cfe
Pre-Prod	ou =preprod,ou=bulkp,o=rsbkau2s,o=swift	Store and Forward	rba.bulkp.sf!pu	pacs.xxx.cfe

4.2 SWIFT options when sending files

Several options are available to participants when sending files via SWIFT FileAct using the above RBA CUGs.

- To elect to send files either in real-time or store-and-forward mode.
- To elect whether or not to receive SWIFT delivery notifications.
- To elect whether or not to use the SWIFT non-repudiation option.

Sending participants must assess the suitability of each option for their own purposes, taking into account cost, efficiency and any legal considerations.

SWIFT Exchange Partners may, at their discretion, populate the FileInfo field in each file transfer request they send to the LVCS. However, the LVCS will not use this information to process the file transfer.

4.3 SWIFT configuration when receiving files

Unless otherwise requested, the RBA will send all LVCS files to SWIFT participants using real-time mode and without the non-repudiation or delivery notification options selected.

SWIFT Exchange Partners should note that the LVCS will populate the FileInfo field of each file transfer request that it sends to SWIFT with the following information:

Compression="None";Source="XXX";Dest="YYY";Type="ZZZZ" where:

XXX is the APCA 3-character clearing code of the Exchange Partner that sent the file to the RBA.

YYY is the APCA 3-character clearing code of the Exchange Partner to which the RBA is sending the file.

ZZZZ is a 4-character code for the File Type, based on the abbreviations contained in Section 2.5 of this document.

4.4 Handling SWIFT Possible Duplicate Emissions

If the LVCS receives a file via SWIFT FileAct which has a Possible Duplicate Emission (PDE) indicator, it will check to see if that transmission is a duplicate emission by looking at the SWIFT Message ID. If another file transfer has already been received with the same SWIFT Message ID, the LVCS will ignore the second transmission. If no other file transfer record has the same SWIFT Message ID, the transmission will be processed.

If the LVCS is unsuccessful in its first attempt to connect to a SWIFT Participant using the FileAct real-time mode (known as a “handshake”), the LVCS will add a PDE indicator in subsequent automated transfer attempts.

4.5 Closed User Group enrolment

Each prospective SWIFT FileAct participant will need to apply to join the relevant CUG(s). The selection of which CUG(s) to join will be based on the participants requirements and can be discussed with the LVCS Help Desk.

The application/enrolment process is via a SWIFT e-order using www.swift.com. Once a request to join a CUG has been submitted, SWIFT will send the enrolment application to the RBA (as Administrator of each CUG) for approval. The RBA will contact the SWIFT applicant to advise the estimated completion time and availability date.

The RBA recommends that applications to enrol in a CUG be completed around one month before the participant's readiness date.

5. COIN

This section outlines arrangements for participants exchanging files via the LVCS using the COIN.

5.1 Participant's COIN Connection

Each COIN LVCS Participant must determine its own requirements for connection to the COIN and complete the necessary contractual arrangements with Telstra. This process will encompass all design considerations such as number of links, speed, and other proprietary configuration requirements. In addition to the link installation process, file management systems and back-end applications will need to be readied to facilitate file transfers using Connect:Direct over IP via the COIN.

Once a new LVCS participant has completed its internal readiness for COIN file exchanges and is ready to establish file exchanges with one or more existing LVCS participants, it should contact the RBA to commence the LVCS connection and setup process.

5.2 RBA COIN Connection

The RBA has dedicated COIN infrastructure with Telstra Fully Redundant Ethernet services operating at 2 Megabits per second (Mbps) into its two Data Centres. Telstra provides two managed routers at each site (total of 4 across the 2 sites).

These links are connected into fully redundant RBA-managed consolidation routers for the purposes IP Security (IPSec) termination. These routers then in turn connect to Firewalls which provide the isolation between internal systems and external connectivity. The following configuration is used:

- static routes;
- IPSec without the use of GRE-tunnels;
- HMAC-SHA-1 for the Encapsulation Security Payload; and
- 256 bit AES data encryption.

The RBA operates an active/active configuration with both the primary and secondary sites running active operational environments.

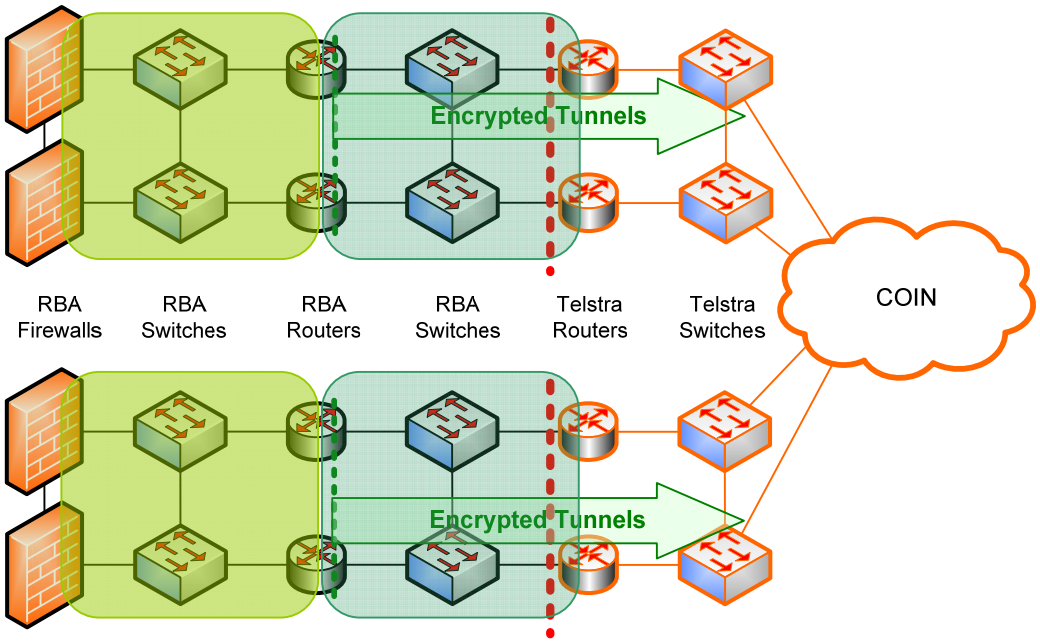
5.3 Exchange of Pre-Shared Secrets

In accordance with the industry-agreed COIN Operating Manual, the RBA requires the establishment of a Pre-Shared Secret (PSS) via the secure exchange of 16-character strings between each partner to form the complete 32-character (256 bit) PSS.

For further information on the exchange of Pre-Shared Secrets, please contact the RBA's Security Group. See RBA contact details in Section 1.5.

5.4 Allocated Network Address Spaces

The RBA currently uses the Telstra allocated 'public' network addressing.



The network address spaces allocated by Telstra for the RBA to use can be obtained by contacting our Communications Group (see Section 1.5 for contact details). Separate address spaces have been allocated for the following purposes.

- For Host addressing at primary site.
- For Host addressing at secondary site.
- For IPSec termination at primary site.
- For IPSec termination at secondary site.

5.5 RBA Host Environments – IP Addressing

The following are the RBA host environments for COIN file transfers. Each row listed below has a separate IP address which can be obtained by contacting Communications Group (see Section 1.5 for contact details).

Type	RBA Location	RBA Business Purpose	Host IP Address
Production	Primary Site	CS1/CS2 Participant Courier Collator Core Banker to Government	*(Please contact the RBA for this information)*
Production	Secondary Site	CS1/CS2 Participant Courier Collator Core Banker to Government	
Production	Primary Site	Low Value Clearing Service Low Value Settlement Service	
Production	Secondary Site	Low Value Clearing Service Low Value Settlement Service	
Test	Primary Site	CS1/CS2 Participant Courier Collator Core Banker to Government	
Test	Secondary Site	CS1/CS2 Participant Courier Collator Core Banker to Government	
Industry Test (Pre-Production)	Primary Site	Low Value Clearing Service Low Value Settlement Service	
Industry Test (Pre-Production)	Secondary Site	Low Value Clearing Service Low Value Settlement Service	

If required, the RBA can assist participants to determine which RBA primary and secondary Host IP addresses should be used for particular file exchanges.

5.6 File Transfer Protocol

The RBA supports the industry decision to use Connect:Direct over IP (CD:IP) as the default file transfer protocol for COIN file exchanges. All files sent to the LVCS via Connect:Direct should be sent in text mode rather than binary mode.

Partners wishing to commence discussions on the setup and configuration of Connect:Direct can contact our Network Support Group (refer to section 1.5 for contact details). Partners wishing to discuss the use of an alternative file transfer protocol should call the RBA's business enquiries contact (refer to section 1.5 for contact details).

5.7 COIN Monitoring

The RBA requests that organisations connecting over the COIN to the RBA provide two Host IP addresses per active site or environment for network monitoring purposes. Typically these addresses are "loopback" or virtual addresses that exist on the host side of the IPSec tunnel.

The RBA will then use these hosts for "ping" monitoring from our internal Enterprise Management System (EMS) via the RBA's Head Office and Business Resumption sites.

The RBA can similarly provide loopback addresses for this purpose on the host network side of the RBA Managed COIN Routers. These are not listed in this document, but are available on request by contacting the RBA's Communications Infrastructure staff. See RBA contact details in Section 1.5.

6. PROCESS FOR ESTABLISHING LVCS FILE TRANSFERS

This section outlines the establishment processes required to use the LVCS for file transfers.

6.1 Establish connectivity

6.1.1 SWIFT

As described in Section 4, SWIFT LVCS Participants must join the relevant SWIFT FileAct service CUG (Closed User Group) and configure their internal systems to send and receive files via the LVCS. Once this has been completed, the LVCS Participant and the RBA will conduct initial file transfer tests to confirm the correct use of the relevant FileAct service, request type and transfer mode.

6.1.2 COIN

As described in Section 5.1, COIN LVCS participants must join the COIN and establish connectivity to the RBA. This includes the exchange of Pre-Shared Secrets and establishment of the IPSEC "tunnel".

Once this has been completed, the RBA and the new LVCS Participant will commence discussions on the exchange of confidential credential information, connectivity to primary and secondary sites, details of the default receiving destination (if applicable) and the scope of initial testing. Participants will be able to commence the configuration of their file transfer applications once these discussions have taken place.

Once configured, the new LVCS Participant will need to ensure that it can send the correct files to each LVCS file transfer application host IP and mailbox destination address. [Details of relevant host IP and mailbox addresses are provided by the RBA as part of the establishment process.]

6.2 Agree project plan with each existing LVCS Participant

The new LVCS Participant should agree on a project plan with each existing LVCS Participant for the exchange of files using the service. The plan would include contact details, meeting arrangements, likely timings (agreed by the new user with each Exchange Partner and the RBA), the list of files to be exchanged, the file rule setup, the file testing schedule and proposed weekend Production implementation arrangements.

6.3 Set-up of File Rules in Pre-Production

This table below outlines the administrative steps that new LVCS Participants, as Clearing Participants, are required to complete to enable file transfer testing to occur with existing LVCS Participants in the Pre-Production Environment. The RBA may vary some steps in this process following discussion with relevant parties. Examples of the forms mentioned are provided in Section 8.

Step	Description
1	The prospective Clearing Participant contacts the RBA to advise that it wishes to transfer files via the LVCS with an existing Clearing Participant. The RBA confirms the scope of the proposed arrangement, including whether the new Clearing Participant will use or act as a Courier. Where the prospective Clearing Participant plans to use a Courier, the RBA will confirm which party will be completing the various administrative tasks listed below. The RBA will also advise the Clearing Participant that the appointment of the Courier must be authorised using the form of authority set out in Exhibit D of the RITS Regulations. The RBA also requests contact details for all parties.
2	The RBA emails a Participant File Transfer Details Form (an Excel spreadsheet) to the new Clearing Participant (or to its Courier, if requested). This form will be pre-populated with details identifying the Receiving Principal and the Sending Principal. The RBA sends a similar form to the existing Clearing Participant to collect the necessary file transfer details for the new file exchanges.
3	The new Clearing Participant (or its Courier, if relevant) and the existing Clearing Participant (or its Courier, if relevant) each complete their forms (spreadsheet) in the role of a Receiving Principal – i.e. it will specify the Receiving File Name for the test files that it will receive from the other Participant, and any non-default destination file path address details (this is explained in Section 2.11). Once completed, the form will be returned via email to the RBA by each Participant (or its Courier, as applicable).
4	The RBA locks the completed cells to prevent amendment and emails the form (spreadsheet) to the other Clearing Participant (or Courier, if applicable). Each Clearing Participant (or its Courier) reviews the form from the perspective of the Sending Principal, and advises if the sending file name will be the same as the listed receiving file name. This is the expectation in most circumstances. Each Sending Principal (or its Courier) returns the form to the RBA via email. Note: If the sending file name is to be different from the receiving file name, the RBA will resend the form with an additional column for the Sending Principal (or its Courier) to fill in the Sending File Name. This would then be returned to the RBA via email.
5	The RBA records the details of each individual file name listed in the form as a File Rule in the LVCS Pre-Production Environment. Each File Rule created will initially be set to a status of inactive.

Step	Description
6	The RBA prints and sends a LVCS Pre-Production Environment Participant File Details Report to each Clearing Participant (or its Courier) for verification. This report shows: • the name of the Clearing Participant; • the name of the Clearing Participant's Courier (if used); • the name of the other Clearing Participant; • the name of the other Clearing Participant's Courier (if used); • the environment (LVCS Pre-Production); • Part A - as a File Sender: o the File Type and File Type description; and o the sending file name (or match expression incorporating 'wild cards' if the file name has variable components); • Part B - as a File Recipient: o the File Type and File Type description; o the receiving file name; and o the nominated non-default destination address details (if applicable).
7	Each Clearing Participant checks that all details in its LVCS Pre-Production Environment Participant File Details Report are correct. The RBA should be contacted if any of the details are incorrect. The RBA will re-issue the report if any changes are required. For the LVCS Pre-Production Environment, each Clearing Participant can confirm to the RBA via an email to the LVCS Help Desk (lvcshelpdesk@rba.gov.au) that the details are correct. (The section on the report for activation date is not used in Pre-Production.)

Once the above steps have been completed, the LVCS static data entry, verification and authorisation processes are complete. However, File Rules are still inactive. The activation of File Rules is covered in the next section.

6.4 Activation of File Rules in Pre-Production

The Exchange Partners (the new LVCS Participant and the existing LVCS Participant) must agree upon the activation date(s) of File Rules for their Pre-Production file exchanges. The activation of all File Rules can occur at the same time, or participants can advise a different time for each File Rule, or group of File Rules.

The RBA will only activate a Pre-Production File Rule relating to a file transfer from one Clearing Participant to another Clearing Participant after it has received authorisation to do so from both parties (or their Courier(s)). For the LVCS Pre-Production Environment, this authority can be provided to the RBA via an email to the LVCS Help Desk (lvcshelpdesk@rba.gov.au).

The RBA will confirm via an email to both participants (and/or Courier(s)) that it has activated the requested File Rule(s) in the LVCS Pre-Production Environment. Testing can now commence.

6.5 Testing of File Exchanges

The LVCS Pre-Production Environment will be available each business day (unless otherwise advised by the LVCS Help Desk) for file transfer testing and testing may occur at the times agreed between participants. However, participants should note that support for the LVCS Pre-Production Environment will only be provided by the RBA between 9.00 am and 5.00 pm each business day.

LVCS testing is expected to include end-to-end file transfer tests (including failover testing). COIN participants are also expected to send their files to both primary and secondary LVCS host IP addresses during this partner testing. Testing of COIN file transfers from the LVCS to a participant's primary and secondary sites is also expected to occur and the timing of these tests will need to be jointly agreed.

Participants are requested to advise the RBA of their expected testing periods and to keep the RBA informed if these dates change.

6.6 Set-up of File Rules in Production

This section outlines the administrative steps for the set-up of File Rules in the LVCS Production Environment. These steps are essentially the same as those used for the LVCS Pre-Production Environment (as outlined in Section 6.3), but with the additional requirement of formal authorisation by RITS Authorised Signatories. The differences between Production and Pre-Production steps are shown in *red italics*.

It is anticipated that the two Clearing Participants will have discussed and agreed upon Production file names and other arrangements prior to the commencement of this process.

Step	Description
1	The RBA emails a Participant File Transfer Details Form (an Excel spreadsheet) to the new Clearing Participant (or to its Courier, if requested). This form will be pre-populated with details identifying the Receiving Principal and the Sending Principal. The RBA sends a similar form to the existing Clearing Participant to collect the necessary file transfer details for the new file exchanges.
2	The new Clearing Participant (or its Courier, if relevant) and the existing Clearing Participant (or its Courier, if relevant) each complete their forms (spreadsheet) in the role of a Receiving Principal – i.e. it will specify the Receiving File Name for the *production* files that it will receive from the other Participant, and any non-default destination file path address details (this is explained in Section 2.11). Once completed, the form will be returned via email to the RBA by each Participant (or its Courier, as applicable).
3	The RBA locks the completed cells to prevent amendment and emails the form (spreadsheet) to the other Clearing Participant (or Courier, if applicable). Each Clearing Participant (or its Courier) reviews the form from the perspective of the Sending Principal, and advises if the sending file name will be the same as the listed receiving file name. This is the expectation in most circumstances. Each Sending Principal (or its Courier) returns the form to the RBA via email. Note: If the sending file name is to be different from the receiving file name, the RBA will resend the form with an additional column for the Sending Principal (or its Courier) to fill in the Sending File Name. This would then be returned to the RBA via email.
4	The RBA records the details of each individual file name listed in the form as a File Rule in the LVCS *Production* Environment. Each File Rule created is initially set to a status of inactive.

Step	Description
5	The RBA prints and sends a LVCS *Production* Environment Participant File Details Report to each Clearing Participant (or its Courier) for verification. This report shows: • the name of the Clearing Participant; • the name of the Clearing Participant's Courier (if used); • the name of the other Clearing Participant; • the name of the other Clearing Participant's Courier (if used); • the environment (LVCS *Production*); • Part A - as a File Sender: o the File Type and File Type description; and o the sending file name (or match expression incorporating 'wild cards' if the file name has variable components); • Part B - as a File Recipient: o the File Type and File Type description; o the receiving file name; and o the nominated non-default destination address details (if applicable).
6	Each Clearing Participant checks that all details in its LVCS *Production* Environment Participant File Details Report are correct. The RBA should be contacted if any of the details are incorrect. The RBA will re-issue the report if any changes are required. *Once all the details have been confirmed as correct, each Clearing Participant must arrange for the report to be signed by its RITS Authorised Signatories. File transfers will not be able to commence without this authorisation from the Sending Principal and Receiving Principal.* *A PDF of the signed report should then be sent by each Clearing Participant to the RBA via email.*

The Participant File Details Report includes a section for the activation of all File Rules. If participants know the intended date and time for the activation of their Production File Rules when the form is to be signed, they can include this instruction in the relevant section of the form. If this information is not known at the time of signing, a separate File Rule Activation Form will be required (see next section).

Once the above steps have occurred, the LVCS static data entry, verification and authorisation processes for set up in the Production Environment are complete. However, File Rules are still inactive. The activation of File Rules is covered in the next section.

6.7 Activation of File Rules in Production

Clearing Participants must agree upon the activation date(s) of File Rules for their Production file exchanges. The activation of all File Rules can occur at the same time, or participants can advise of a different date/time for each File Rule or group of File Rules.

The RBA will only activate a Production File Rule relating to a file transfer from one Clearing Participant to another Clearing Participant after it has received authorisation to do so from both Clearing Participants. For the LVCS Production Environment this authority must be given by each Clearing Participant's RITS Authorised Signatories. If the activation time is known when the parties are confirming file name details on the Participant File Details Report, they can specify the activation time when they return that report to the RBA. Alternatively, they can request File Rule activation by

using the separate LVCS File Rule Activation Form (this form is available on the RITS Information Facility; a sample is shown in Section 8.3).

If the Clearing Participant is using a Courier for its file transfers, the RBA will also check that the appointment of the Courier has occurred in accordance with Exhibit D of the RITS Regulations.

The RBA will confirm via an email to both participants (and/or Courier, for the existing LVCS participant) that it has scheduled the activation of the requested File Rule(s) at the specified time.

6.8 Production Implementation

The agreed date for the activation of File Rules in either or both directions is essentially the Production implementation date for file transfers. Clearing Participants can agree if their implementation is to be staged, using only a subset of File Types to begin with. The RBA expects all Production activations to occur on a weekend (from Saturday morning, to avoid the risk of Friday's Production exchanges being affected).

It is expected that Exchange Partners will wish to exchange a small number of test files across the Production environment on the implementation weekend to verify their systems and links. This can occur after the activation of agreed File Rules on the LVCS. Exchange Partners may use their ongoing Production File Rules for this type of testing. Alternatively, Exchange Partners may request the RBA to setup and activate special "TEST" File Rules to allow these tests to occur, and to deactivate these File Rules once the tests are completed. All requests for activation and deactivation of Production File Rules must be made by both Clearing Participants in writing using the LVCS File Rule Activation Form.

Participants must take great care when performing test file transfers that use Production infrastructure and addresses.

7. NEW LVCS PARTICIPANT CHECKLIST

The following checklist provides a summary of the tasks that need to be undertaken by new LVCS Participants.

ACTIVITY	REFER TO SECTION / STEP	COMPLETED?
Establish Network connectivity: SWIFT users only	4, 6.1.1	
Join relevant SWIFT FileAct service CUG.		
Configure systems to allow test files to be exchanged with the LVCS.		
Send a test file to the LVCS using the correct SWIFT FileAct service and request type ('pacs.xxx.cfe').		
Establish Network connectivity: COIN users only	5, 6.1.2	
Join Telstra COIN.		
Establish network communications with RBA.		
Exchange information with RBA concerning file transfer application configuration details.		
Configure systems to allow test files to be exchanged with the LVCS Pre-Production Environment.		
Send a test file to each test RBA LVCS Host IP address and, for Couriers, to each mailbox directory advised by the RBA.		
Agree Project Plan with other participant	6.2	
Pre-Production: Set up of File Rules	6.3	
Contact the RBA to advise that you wish to commence the process of testing file transfers with an existing LVCS participant.	Step 1	
Advise the RBA of the scope and details of the proposed arrangement.	Step 1	
Advise contact details.	Step 1	
If a Courier is being used, commence process to formally appoint Courier as per Exhibit D of the RITS Regulations.	Step 1	
Receive Participant File Transfer Details Form from the RBA.	Step 2	
Enter test file names into the Participant File Transfer Details Form as a Receiving Principal (i.e. specify test file names for all files to be received from the other Clearing Participant), and email the completed form back to RBA.	Step 3	

ACTIVITY	REFER TO SECTION / STEP	COMPLETED?
Receive Participant File Transfer Details Form, as completed by the other Clearing Participant, from the RBA.	Step 4	
Review the other Clearing Participant's completed form, as a Sending Principal. This involves checking that the test file names listed are the same as the file names you will send to the other Participant. Return the form to the RBA.	Step 4	
Receive a Participant File Details Report from the RBA which lists all File Rules between you and the other Clearing Participant entered into the LVCS.	Step 6	
Carefully review the details in the Participant File Details Report.	Step 7	
Confirm via email to the RBA that details are correct.	Step 7	
Pre-Production: Activate File Rules	6.4	
Contact the other Clearing Participant (or its Courier, if applicable) to agree on the activation date for test File Rules.		
Advise the RBA via email of the activation date. (The other Clearing Participant (or its Courier, if applicable) will also email the RBA to confirm this date).		
Pre-Production: Testing of file exchanges	6.5	
Perform end-to-end file transfer testing as agreed with the other Clearing Participant.		
For COIN participants, perform testing using the LVCS primary and secondary host IP addresses, and using both your primary and your secondary sites.		
Production: Set up of File Rules	6.6	
Receive Participant File Transfer Details Form from the RBA.	Step 1	
Enter production file names into the Participant File Transfer Details Form as a Receiving Principal (i.e. specify Production file names for all files to be received from the other Clearing Participant), and email the completed form back to RBA.	Step 2	
Receive Participant File Transfer Details Form, as completed by the other Clearing Participant, from the RBA.	Step 3	
Review the other Clearing Participant's completed form, as a Sending Principal. This involves checking that the Production file names listed are the same as the file names you will send to the other Participant. Return the form to the RBA.	Step 3	

ACTIVITY	REFER TO SECTION / STEP	COMPLETED?
Receive a Participant File Details Report from the RBA which lists all File Rules between you and the other Clearing Participant entered into the LVCS.	Step 5	
Carefully review the details in the Participant File Details Report. If known, insert the agreed activation date. Sign the report and email a PDF version to the RBA. The report must be signed by your RITS Authorised Signatories.	Step 6	
Production: Activate File Rules If you and the other Clearing Participant have completed the same activation date and time on your Participant File Details Report, the RBA will act on that instruction to activate the File Rules. Otherwise, agree upon the activation date and time with the other Participant and complete the LVCS File Rule Activation Form. Sign the form and email a PDF version to the RBA. The form must be signed by your RITS Authorised Signatories. If a Courier is being used, ensure that it has been formally appointed in accordance with Exhibit D of the RITS Regulations. The RBA will schedule activation of the File Rules at the specified date and time, and confirm to both Clearing Participants (and/or their Couriers, as applicable) that this has been done.	6.7	
Production: Cutover Arrange, as necessary, the exchange of test files using Production systems on the implementation weekend. (Note that Production File Rules activated on the implementation weekend will remain active for the commencement of normal production file exchanges on Monday.)	6.8	

8. SAMPLE LVCS FORMS AND REPORTS

This section provides indicative samples of the forms that will be used for static data collection and validation, for authorisation of File Rule activation and for requesting a resend of a file. Participants should note that the format of these forms may change from time to time and that the latest forms can be requested from the LVCS Help Desk.

8.1 Participant File Transfer Details Form

The Participant File Transfer Details Form is an Excel spreadsheet, partly pre-filled by the RBA. Each Receiving Principal completes details of the receiving file names it requires (by File Type) from the other Clearing Participant. COIN participants may also complete specific destination address details. (If they are different from their default destination address, refer to Section 2.11.)

The Sending Principal then confirms whether or not it will deliver the files with the same file names as nominated by the Receiving Principal. If the file names are going to be different from those advised by the Receiving Principal, the RBA should be contacted to amend the form to allow details of the sending file names to be exchanged.

The spreadsheet has two or more worksheets:

- instructions for completion; and
- one or more worksheets for data collection. These worksheets contain details of the Sending Principal and Receiving Principal and their Couriers (if used) that are completed by the RBA. Each worksheet contains a table of all approved File Types, with spaces for the Receiving Principal to type in the receiving file name and file path/destination address (as required). Separate data collection spreadsheets must be completed for each combination of Sending and Receiving Principal.

Each participant will receive two forms, one as the Receiving Principal (to nominate the file names it wishes to receive) and the second as the Sending Principal (to confirm the file names it will send). The second version of the form will be sent by the RBA to the Sending Principal after completion by the Receiving Principal.

The worked example shown on the following pages is for BECS file transfers between North Bank and South Bank.

Instructions on First Worksheet of Form

RBA Low Value Clearing Service

Participant File Transfer Details Form

Instructions

The structure of this form is aligned with existing industry practice whereby the receiver of files nominates the file names they are to receive from the sender.

One Clearing Participant, as Receiving Principal, will complete this form with details of all files they will **receive** from another Clearing Participant (via the LVCS).

The other Clearing Participant, as Sending Principal, will be asked to confirm that they will use those file names when delivering files to the LVCS. If they will not use those names, file name translation will be required, and additional details will be sought by the RBA from this Clearing Participant.

The RBA will complete the environment and participant details following initial discussions with each Clearing Participant. Each participant must check that the details recorded are accurate.

Receiving Principal:

Fill in the table with the details of each file you will **receive** from the other Clearing Participant.

Only COIN Participants may need to complete Column C "File Path". This column can be left blank for files that will be delivered to the default destination setup during establishment of COIN connectivity with the LVCS. File Path may be a sub-mailbox or LAN sub-directory address.

COIN and SWIFT Participants must complete Column D "File Name to be Received by LVCS".

If you do not exchange a particular file type with this Clearing Participant, write NOT EXCHANGED.

Email the form back to the RBA (**lvcshelpdesk@rba.gov.au**).

The RBA will lock the cells completed by the Receiving Principal to prevent amendment and email the form to the Sending Principal.

Sending Principal:

The Sending Principal checks that the file names indicated in Column D are the names that each file will have when they are delivered to the LVCS for on-sending to the Receiving Principal.

(The file name must be the outgoing (or destination) file name, not the source name that the file may have when it is generated by your application.)

If you are going to deliver the file to the LVCS with a different file name to that shown in Column D, please contact the RBA as you will need to complete additional details, and the RBA will need to amend the form to allow this to occur.

Email the form back to the RBA (**lvcshelpdesk@rba.gov.au**).

Verification:

In Pre-Production, once verified, each participant will email the RBA (lvcshelpdesk@rba.gov.au) to confirm the report is correct.
In Production, once verified, each participant will need to arrange to have this report signed by their RITS Authorised Signatories and return it to the RBA, via pdf email.

Second Worksheet – Completed by North Bank as Receiving Principal

RBA Low Value Clearing Service

Participant File Transfer Details Form

Files to (Receiving Principal): **North Bank**
via Courier (File Receiver): **North Agent Services**

Files from (Sending Principal): **South Bank**
via Courier (File Sender): **-**

Environment: **Pre-Production**

Receiving Principal to complete Columns C and D

For COIN Participants only, type the file path (if applicable) into Column C "File Path".

For example, this may be a sub-mailbox, or a LAN address.

Excel will not allow you to type / as the first character in a cell. Use an apostrophe as the first character to indicate text.

For COIN and SWIFT Participants, type the names that you wish incoming files to have into Column D "File Name to be Received from LVCS".

Write 'NOT EXCHANGED' for all file types not exchanged with this Clearing Participant.

File Type	File Type Description	File Path *(Completed by Receiving Principal, if required)*	File Name to be Received from LVCS *(Completed by Receiving Principal)*
EPDA	File A – Electronic Presentment		
EPDB	File B – Presentment Ack and Technically Invalid		
EPDC	File C – Presentment TI Ack		
EPDD	File D – Dishonour, Dishonour refusal and V/R		
EPDE	File E – Dishonour Ack and Technically Invalid		
EPDF	File F – Dishonour TI Ack		
DENT	Direct Entry Normal Transaction File	**/infile/becs/data**	**PTUP.DENT.SBK.TXN.INFILE**
DENS	Direct Entry Normal Summary File	**/infile/becs/data**	**PTUP.DENS.SBK.TXN.INFILE**
DEGT	Direct Entry Government Transaction File		
DEGS	Direct Entry Government Summary File		
CEIS	CECS Interchange Summary Report		
TEST	Test Files		

Second Worksheet – Completed by South Bank as Receiving Principal

RBA Low Value Clearing Service
Participant File Transfer Details Form

Files to (Receiving Principal): **South Bank**
via Courier (File Receiver): **-**

Files from (Sending Principal): **North Bank**
via Courier (File Sender): **North Agent Services**

Environment: **Pre-Production**

Receiving Principal to complete Columns C and D

For COIN Participants only, type the file path (if applicable) into Column C "File Path".
For example, this may be a sub-mailbox, or a LAN address.
Excel will not allow you to type / as the first character in a cell. Use an apostrophe as the first character to indicate text.

For COIN and SWIFT Participants, type the names that you wish incoming files to have into Column D "File Name to be Received from LVCS".

Write 'NOT EXCHANGED' for all file types not exchanged with this Clearing Participant.

File Type	File Type Description	File Path *(Completed by Receiving Principal, if required)*	File Name to be Received from LVCS *(Completed by Receiving Principal)*
EPDA	File A – Electronic Presentment		
EPDB	File B – Presentment Ack and Technically Invalid		
EPDC	File C – Presentment TI Ack		
EPDD	File D – Dishonour, Dishonour refusal and V/R		
EPDE	File E – Dishonour Ack and Technically Invalid		
EPDF	File F – Dishonour TI Ack		
DENT	Direct Entry Normal Transaction File		**PDESYS.INFILE.TXN.STH**
DENS	Direct Entry Normal Summary File		**PDESYS.INFILE.SUMM.STH**
DEGT	Direct Entry Government Transaction File		
DEGS	Direct Entry Government Summary File		
CEIS	CECS Interchange Summary Report		
TEST	Test Files		

8.2 Participant File Transfer Details Report

Once the RBA has recorded the details advised on each Participant File Transfer Details Form, a Participant File Transfer Details Report will be produced for each Clearing Participant. This report will show the details of all File Rules that have been entered and will be split to show files sent and files received. The report shows this file exchange information against a single other Clearing Participant only.

For Production, the relevant Clearing Participant must check and have the report signed by two RITS Authorised Signatories. The activation of File Rules can also be authorised as part of this process. Once signed, the report can be returned to the RBA as a PDF document attached to an email.

The worked example on the following pages show North Bank's report for its exchanges with South Bank, and South Bank's report for its exchanges with North Bank.

Participant File Transfer Details Report: For North Bank with South Bank

RBA Low Value Clearing Service

Participant File Transfer Details Report

North Bank

via Courier: **North Agent Services**

With Clearing Participant: **South Bank**
via Courier: **-**

Environment: **Pre-Production**

This report is used by the Reserve Bank to confirm that the following details, which have been entered into RITS for participation in the Low Value Clearing Service, are complete and correct.

Part A: Files Sent to the LVCS by North Bank to be sent to South Bank

File Type	File Type Description	File Name Sent to LVCS
EPDA	File A – Electronic Presentment	
EPDB	File B – Presentment Ack and Technically Invalid	
EPDC	File C – Presentment Technically Invalid Ack	
EPDD	File D – Dishonour, Dishonour Refusal and V/R	
EPDE	File E – Dishonour Ack and Technically Invalid	
EPDF	File F – Dishonour Technically Invalid Ack	
DENT	Direct Entry Normal Transaction File	**PDESYS.INFILE.TXN.STH**
DENS	Direct Entry Normal Summary File	**PDESYS.INFILE.SUMM.STH**
DEGT	Direct Entry Government Transaction File	
DEGS	Direct Entry Government Summary File	
CEIS	CECS Interchange Summary Report	
TEST	Test Files	

Part B: Files Sent to the LVCS by South Bank to be sent to North Bank

File Type	File Type Description	File Name Received from LVCS	Destination Directory *(if other than the root or default destination)*
EPDA	File A – Electronic Presentment		
EPDB	File B – Presentment Ack and Technically Invalid		
EPDC	File C – Presentment Technically Invalid Ack		
EPDD	File D – Dishonour, Dishonour Refusal and V/R		
EPDE	File E – Dishonour Ack and Technically Invalid		
EPDF	File F – Dishonour Technically Invalid Ack		
DENT	Direct Entry Normal Transaction File	**PTUP.DENT.SBK.TXN.INFILE**	**/infile/becs/data**
DENS	Direct Entry Normal Summary File	**PTUP.DENS.SBK.TXN.INFILE**	**/infile/becs/data**
DEGT	Direct Entry Government Transaction File		
DEGS	Direct Entry Government Summary File		
CEIS	CECS Interchange Summary Report		
TEST	Test Files		

Part C: Activation of File Types

*Tick **one** of the options below.*

____ Please activate **all** of the file types above at: Date ___ / ___ / 20_ _ Time ___: ___ am / pm (circle one)

____ I will advise of activation date/s separately. *(Contact the Reserve Bank to discuss your requirements and to obtain an appropriate form.)*

Part D: RITS Authorised Signatories

Name (please print) _____ Name (please print) _____

Signature _____ Signature _____

Date (Day/Month/Year) _____ / _____ / 20____ Date (Day/Month/Year) _____ / _____ / 20____

Participant File Transfer Details Report: For South Bank with North Bank

RBA Low Value Clearing Service
Participant File Transfer Details Report
South Bank

via Courier: -

With Clearing Participant: **North Bank**
via Courier: **North Agent Services**
Environment: **Pre-Production**

This report is used by the Reserve Bank to confirm that the following details, which have been entered into RITS for participation in the Low Value Clearing Service, are complete and correct.

Part A: Files Sent to the LVCS by South Bank to be sent to North Bank

File Type	File Type Description	File Name Sent to LVCS
EPDA	File A – Electronic Presentment	
EPDB	File B – Presentment Ack and Technically Invalid	
EPDC	File C – Presentment Technically Invalid Ack	
EPDD	File D – Dishonour, Dishonour Refusal and V/R	
EPDE	File E – Dishonour Ack and Technically Invalid	
EPDF	File F – Dishonour Technically Invalid Ack	
DENT	Direct Entry Normal Transaction File	**PTUP.DENT.SBK.TXN.INFILE**
DENS	Direct Entry Normal Summary File	**PTUP.DENS.SBK.TXN.INFILE**
DEGT	Direct Entry Government Transaction File	
DEGS	Direct Entry Government Summary File	
CEIS	CECS Interchange Summary Report	
TEST	Test Files	

Part B: Files Sent to the LVCS by North Bank to be sent to South Bank

File Type	File Type Description	File Name Received from LVCS	Destination Directory *(if other than the root or default destination)*
EPDA	File A – Electronic Presentment		
EPDB	File B – Presentment Ack and Technically Invalid		
EPDC	File C – Presentment Technically Invalid Ack		
EPDD	File D – Dishonour, Dishonour Refusal and V/R		
EPDE	File E – Dishonour Ack and Technically Invalid		
EPDF	File F – Dishonour Technically Invalid Ack		
DENT	Direct Entry Normal Transaction File	**PDESYS.INFILE.TXN.STH**	
DENS	Direct Entry Normal Summary File	**PDESYS.INFILE.SUMM.STH**	
DEGT	Direct Entry Government Transaction File		
DEGS	Direct Entry Government Summary File		
CEIS	CECS Interchange Summary Report		
TEST	Test Files		

Part C: Activation of File Types

*Tick **one** of the options below.*

____ Please activate **all** of the file types above at: Date ___ / ___ / 20_ _ Time ___: ___ am / pm (circle one)

____ I will advise of activation date/s separately. *(Contact the Reserve Bank to discuss your requirements and to obtain an appropriate form.)*

Part D: RITS Authorised Signatories

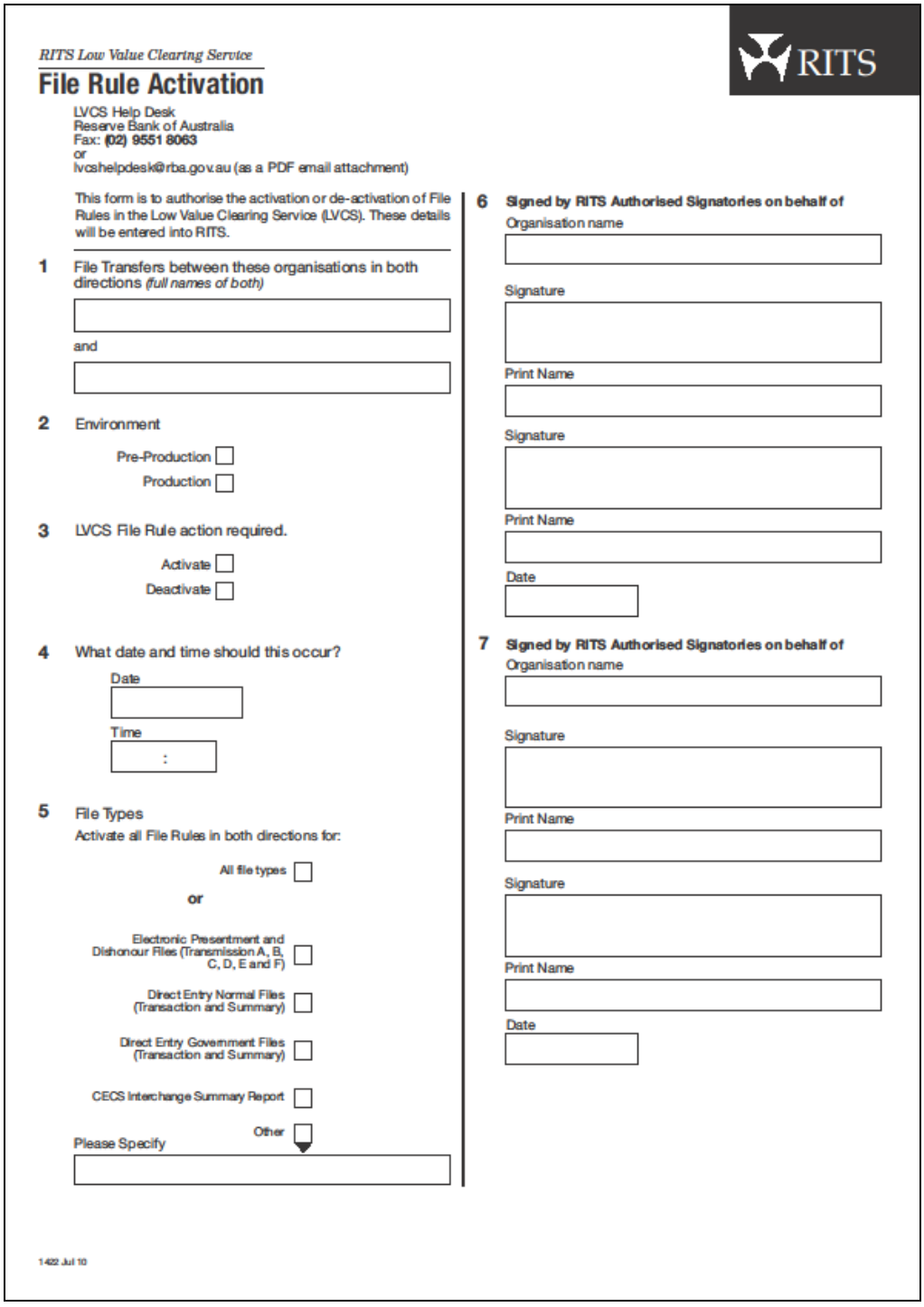
Name (please print) _____ Name (please print) _____

Signature _____ Signature _____

Date (Day/Month/Year) _____ / _____ / 20____ Date (Day/Month/Year) _____ / _____ / 20____

8.3 LVCS File Rule Activation Form

This form allows for File Rules to be activated and deactivated. It will be used when the authorisation to activate File Rules did not occur as part of the authorisation provided on the Participant File Transfer Details Report. In Production, both Clearing Participants will need to authorise the activation (or deactivation) of individual File Types, using the LVCS File Rule Activation Form shown below. This form is available on the RITS Information Facility.



RITS Low Value Clearing Service

File Rule Activation

RITS

LVCS Help Desk
Reserve Bank of Australia
Fax: **(02) 9551 8063**
or
lvcshelpdesk@rba.gov.au (as a PDF email attachment)

This form is to authorise the activation or de-activation of File Rules in the Low Value Clearing Service (LVCS). These details will be entered into RITS.

1 File Transfers between these organisations in both directions *(full names of both)*

and

2 Environment

Pre-Production ☐
Production ☐

3 LVCS File Rule action required.

Activate ☐
Deactivate ☐

4 What date and time should this occur?

Date

Time
:

5 File Types

Activate all File Rules in both directions for:

All file types ☐

or

Electronic Presentment and Dishonour Files (Transmission A, B, C, D, E and F) ☐

Direct Entry Normal Files (Transaction and Summary) ☐

Direct Entry Government Files (Transaction and Summary) ☐

CECS Interchange Summary Report ☐

Other ☐

Please Specify

6 **Signed by RITS Authorised Signatories on behalf of**

Organisation name

Signature

Print Name

Signature

Print Name

Date

7 **Signed by RITS Authorised Signatories on behalf of**

Organisation name

Signature

Print Name

Signature

Print Name

Date

1422 Jul 10

8.4 LVCS File Resend Authorisation Form

This form allows participants to request the resend of a production file that the LVCS shows as successfully transferred to the File Recipient. Please refer to Section 3.5.3 of this document for more information. This form is available on the RITS Information Facility.

RITS Low Value Clearing Service

File Re-Send Authority

RITS

To: LVCS Help Desk
Reserve Bank of Australia
Fax: (02) 9551 8063
or
lvcshelpdesk@rba.gov.au *(as a PDF email attachment)*

LVCS Helpdesk: 1800 617 566

This form is to authorise the re-sending of a file previously sent via the Low Value Clearing Service (LVCS). This form is only for files that, according to Reserve Bank records, have already been successfully exchanged.

Two copies of this form must be signed by authorised officers and sent to the RBA: one copy by the Sending Clearing Participant and the other by the Receiving Clearing Participant. Sending and Recieving Clearing Participants acknowledge that the RBA is not required to act on the instructions of this form until it has received both copies.

The RBA assumes no responsibility or liability for any loss either direct or incidental in carrying out the file re-send instruction authorised by this form.

1 Clearing Participant Name

2 Sending ☐ or Receiving ☐

3 Via Agent/Courier
(Optional: only to be filled in if an Agent exchanges files on behalf of the Clearing Participant that fills in this form).

4 Other Clearing Participant Name

5 Name of File to be re-sent by LVCS

6 File type

7 Date file was originally sent

8 Approximate time file was originally sent

9 LVCS File Re-send RITS Authorised Signatories

Authorised by

Signature 1

Print Name

Signature 2

Print Name

Date

1425 Jul 10

9. GLOSSARY

The following terms are used in this document.

Approved File Type

A file type that has been approved by the RBA to be transferred via the LVCS. Refer to Section 2.5 for more detail.

LVCS Participant

A party that uses the LVCS. This can be any of the following parties:

- a Clearing Participant that transfers files directly to and from the LVCS;
- a Clearing Participant that uses a Courier to transfers files to and from the LVCS;
- a Clearing Participant that acts as a Courier for another Clearing Participant; or
- a Courier.

Clearing Participant

A member of a clearing system, approved by the RBA for the LVCS, that exchanges clearing files with other members, by itself or via a Courier. In APCA's APCS and BECS, it is a Tier 1 member. This term will also encompass a party that is not a Tier 1 member of APCS, BECS, or a settling member of CECS, but is otherwise eligible to exchange files related to payments activity with other Clearing Participants.

Courier

A third party appointed by a Clearing Participant to send files to, and receive files from, other Clearing Participants. The term "Courier" is used generally in this document to refer to a processing agent appointed by a Clearing Participant. A Courier does not need to be a Clearing Participant. (RITS Members should note that the terms 'Agent' and 'Agency Arrangement' are used in the RITS Regulations and Conditions of Operation to refer to the Courier and arrangements made with the Courier.)

Exchange Partner

The party with which files are exchanged. The Exchange Partner may be a Clearing Participant (who may also act as Courier for other Clearing Participants) or a Courier.

File Rule

A combination of the File Sender and file name that the LVCS uses to uniquely identify and process an incoming file. The File Rule specifies who the file should be delivered to and how it should be transferred.

The File Rule may or may not be identical to the file name.

File Recipient

The Exchange Partner that receives a file from the LVCS.

The File Recipient may receive file transfers for itself (i.e. as a Clearing Participant) and/or as a Courier (i.e. on behalf of another Clearing Participant).

Receiving Principal The Clearing Participant who receives a file delivered by the LVCS, i.e. the ultimate destination. If the Clearing Participant uses a Courier, the files will be delivered by the LVCS to the Courier to be sent to the Clearing Participant. If the Clearing Participant does not use a Courier, the files will be delivered by the LVCS directly to the Clearing Participant.

File Sender The Exchange Partner that delivers a file to the LVCS.

The File Sender may send file transfers for itself (i.e. as a Clearing Participant) and/or as a Courier (i.e. on behalf of another Clearing Participant).

Sending Principal The Clearing Participant whose file is delivered to the LVCS, i.e. the ultimate source. If the Clearing Participant uses a Courier, the files will be delivered by the Clearing Participant to its Courier and then sent to the LVCS. If the Clearing Participant does not use a Courier, the files will be delivered by the Clearing Participant directly to the LVCS.